Study & Master

Maths Online

Solutions **Grade 4**

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Worksheet 1: Counting

Activity 1

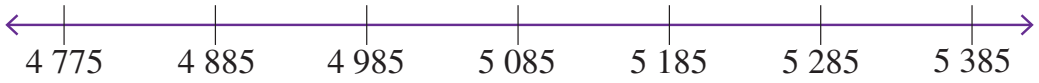
1. 3; 103; 203; 303; 403; 503; 603; 703; 803; 903
2. 562; 572; 582; 592; 602; 612; 622; 632; 642; 652; 662
3. 480; 460; 440; 420; 400; 380; 360; 340; 320; 300; 280; 260; 240
4. 3 000; 3 050; 3 100; 3 150; 3 200; 3 250; 3 300; 3 350; 3 400; 3 450; 3 500; 3 550; 3 600; 3 650; 3 700; 3 750; 3 800; 3 850; 3 900; 3 950; 4 000; 4 050; 4 100; 4 150; 4 200; 4 250; 4 300; 4 350; 4 400; 4 450; 4 500; 4 550; 4 600; 4 650; 4 700; 4 750; 4 800; 4 850; 4 900; 4 950; 5 000
5. 8 900; 8 800; 8 700; 8 600; 8 500; 8 400; 8 300; 8 200; 8 100; 8 000; 7 900; 7 800; 7 700; 7 600; 7 500; 7 400; 7 300; 7 200; 7 100; 7 000; 6 900; 6 800; 6 700; 6 600; 6 500; 6 400; 6 300; 6 200; 6 100; 6 000

Activity 2

I have (2 × R100) + (2 × R20) + R50 + (2 × R10) + (3 × R5) + (4 × R2) + (3 × R1)
= R336

Activity 3

1.



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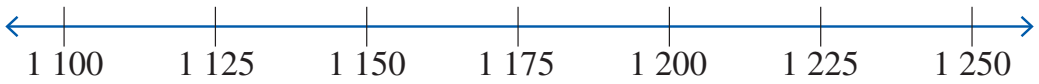


Worksheet 2: Ordering and comparing numbers

Activity 1

1. 1 098; 1 312; 2 561; 3 245; 5 645
2. 530; 706; 818; 907; 970; 989

Activity 2

1. 8 597; 6 945; 6 121; 3 565; 2 463
2. 7 854; 6 489; 4 562; 3 185; 2 697
3. 3 586; 3 249; 2 942; 2 789; 1 562
4. 8 920; 8 594; 7 924; 7 800; 7 406
5. 7 873; 7 165; 7 042; 6 901; 6 742

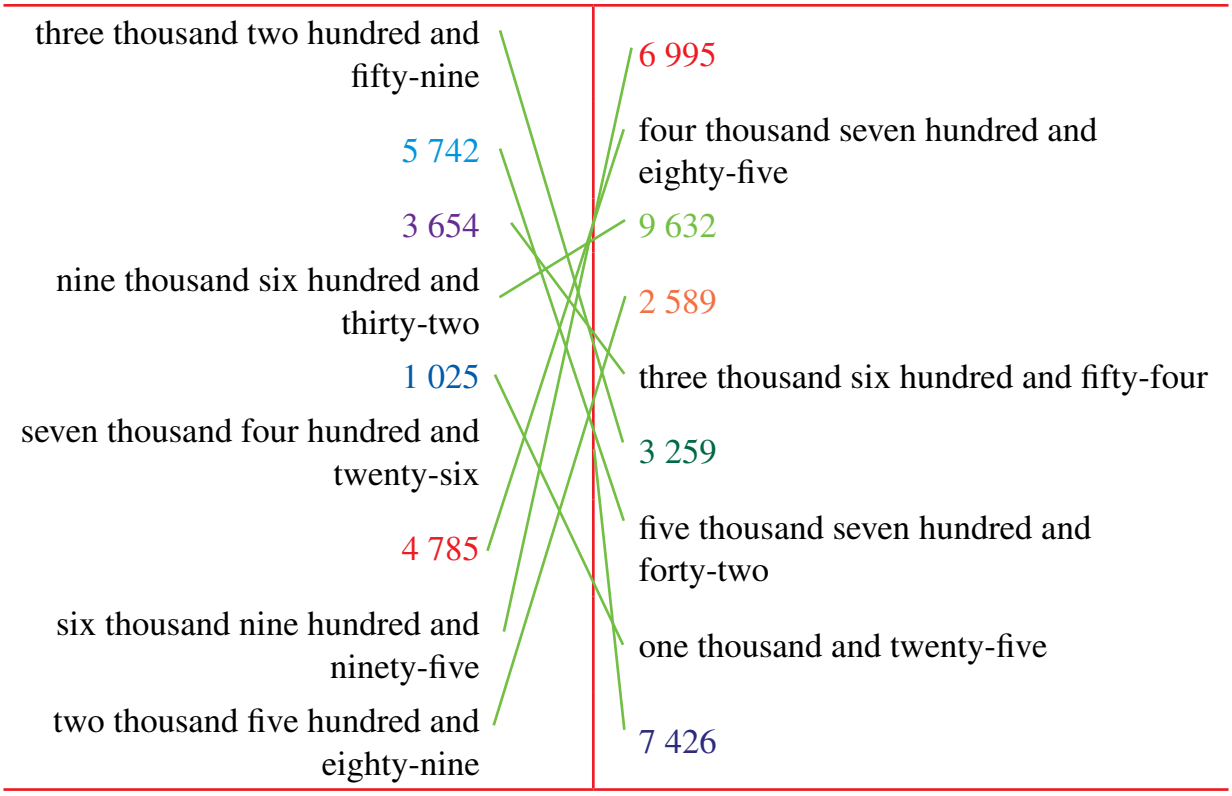
Activity 3

1 & 2. 1 479; 1 497; 1 719; 1 791; 1 947; 1 974;
4 179; 4 197; 4 719; 4 791; 4 917; 4 971;
7 149; 7 194; 7 419; 7 491; 7 914; 7 941;
9 147; 9 174; 9 417; 9 471; 9 714; 9 741

3. 9 741; 9 714; 9 471; 9 417; 9 174; 9 147;
7 941; 7 914; 7 491; 7 419; 7 194; 7 149;
4 971; 4 917; 4 791; 4 719; 4 197; 4 179;
1 974; 1 947; 1 791; 1 719; 1 497; 1 479

Worksheet 3: Number names

Activity 1



Activity 2

1. **a)** six thousand five hundred and eighty-nine

b) seven thousand eight hundred and forty-three

c) one thousand five hundred and eighty

2. **a)** 2 981 **b)** 8 246 **c)** 4 773

Worksheet 4: Odd and even numbers

Activity 1

1 269	2 365	982	5 024
3 865	4 858	9 642	93
8 470	6 323	38	1 561
2 987	895	3 256	127
7 530	1 459	501	8 977

Extension Activity

1. Odd; 5 + 4 = 9

2. Even; 2 + 4 = 6

3. Even; 7 + 3 = 10

4. Even; 6 – 4 = 2

5. Even; 7 – 3 = 4

Worksheet 5: Place value (1)

Activity 1

1&2. Learners' own work

Activity 2

a) 800 + 90 + 6

b) 7 000 + 500 + 30 + 2

c) 4 000 + 80 + 5

d) 3 000 + 100

e) 5 000 + 300 + 60 + 7

f) 9 000 + 800 + 20 + 1

g) 6 000 + 400 + 70 + 3

h) 2 000 + 200 + 50 + 8

Activity 3

1. 5 789

2. 9 875

3. 8 795 or 9 785 or 5 789 or 8 759 or 9 758 or 5 798

4.a & b) 5 789; 5 798; 5 879; 5 897; 5 978; 5 987;
7 589; 7 598; 7 859; 7 895; 7 958; 7985;
8 579; 8 597; 8 759; 8 795; 8 957; 8 975;
9 578; 9 587; 9 758; 9 785; 9 857; 9 875;

Worksheet 6: Place value (2)

Activity 1

Row 1: 400

Row 2: 9 000; 8

Row 3: 30; 0

Row 4: 0; 50

Activity 2

1. 5 992 **2.** 7 531

3. 648 **4.** 1 853

Activity 3

1. 5 **2.** 5 351 **3.** tens

4. **a)** 50 **b)** 500

5. 3

Extension Activity

1. 30 **2.** 7 000

Worksheet 7: Rounding

Activity 1

1. 350 **2.** 9 480 **3.** 6 400

4. 1 000 **5.** 5 000

Activity 2

Nile: 6 850; 6 900; 7 000

Congo: 4 700; 4 700; 5 000

Niger: 4 180; 4 200; 4 000

Zambezi: 2 570; 2 600; 3 000

Orange: 2 090; 2 100; 2 000

Activity 3

1. R1 600
2. R1 291; R1 292; R1 293; R1 294
3. R300

Extension Activity

1. 685; 686; 687; 688; 689; 691; 692; 693; 694
2. Any 5 numbers between 4 650 and 4 749

Worksheet 8: Addition

Activity 1

1. 10 281
2. 9 815
3. 15 027

Activity 2

1. 7 510
2. 11 523
3. 14 227

Activity 3

1. 6 852
2. 12 310
3. 15 519

Activity 4

Learners' own work

Activity 5

1. 273
2. 2 292
3. 1 917
4. 3 479

Worksheet 9: Addition word problems

Activity 1

1. 7 565 + 5 657 = R13 222
2. 7 853 – 4 625 = 3 228 male runners
3. 2 434 + 3 253 + 1 982 = 7 669 learners
4. 8 425 + 9 315 = R17 740
5. 8 567 – 5 621 = 2 946 tickets
6. 6 555 + 4 225 = 10 780 oranges
7. No, 3478 + 2 444 = 5 922

Extension Activity

1. 1 247 + 3 935 + 13 + 29 + 43 + 75 = 5 342
2. 1 594

Worksheet 10: Subtraction

Activity 1

1. 8 927
2. 2 086
3. 1 476

Activity 2

1. 212
2. 2 587
3. 3 655

Activity 3

8 038 – 6 889 = 1 149

2 392 – 528 = 1 864

4 046 – 1455 = 2 591

7 121 – 1 031 = 6 090

3 387 – 2 199 = 1 188

Activity 4

1. 9 750
2. 4 127
3. 1 879
4. 976

Worksheet 11: Subtraction word problems

Activity 1

1. 3 742 – 2 631 = 1 111
2. 4 583 – 1 268 = 3 315 females
3. 6 787 – 3 625 = 3 162 km
4. 5 740 – 2 935 = R2 805
5. 9 356 – 7 690 = R1 666
6. 9 386 – 8 695 = R691
7. 8 550 – 3 198 = 5 352 litres
8. 7 862 – 5 665 = R2 197

Extension Activity

8 741 – 2 94**2** = 5 **7**99
3 **6**42 – 1 52**6** = **2** 116
6 **12**3 – 2 **1**89 = **3** 934

Worksheet 12: Mixed addition and subtraction

Activity 1

1. 2 306
2. 6 914
3. 6 584
4. 3 695
5. 7 424
6. 4 092
7. 1 008
8. 15 702
9. 5 151
10. 586

Activity 2

1.

2 284	2 719	2 662
2 933	**2 555**	**2 177**
2 448	2 391	2 826

Number = 7 665

(**Note:** Incorrect number in Activity Book.)

2.

3 034	**2541**	3 236
3 139	2 937	**2 735**
2 638	3 333	**2 840**

Number = 8 811

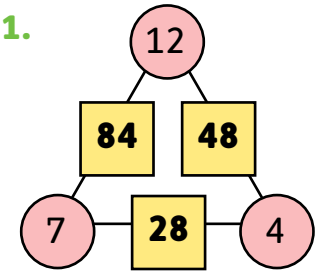
Activity 3

1. 9 380
2. 2 570
3. 3 525
4. 2 174

Worksheet 13: Multiplication

Activity 1

1.



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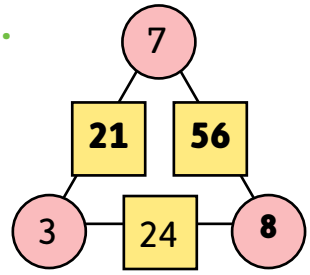

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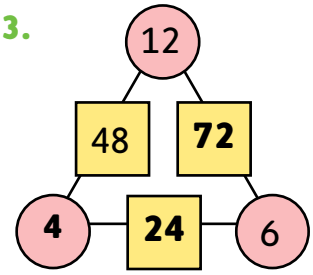

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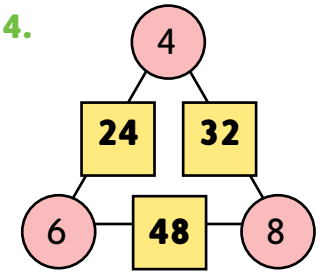

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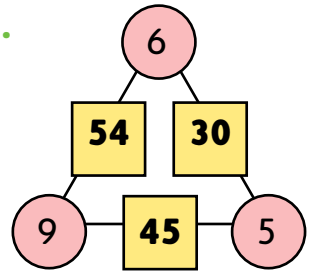

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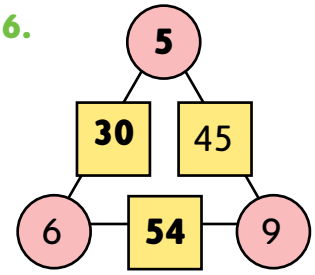


Activity 2

Learners' own work

Activity 3

1.

×	8	3		7
3	**24**	**9**	**18**	**21**
	40	**15**	30	**35**
9	**72**	**27**	**54**	**63**
2	**16**	**6**	12	**14**

2.

×	4	**8**	7	9
3	**12**	**24**	**21**	**27**
5	**20**	40	**35**	**45**
2	**8**	**16**	**14**	**18**
6	**24**	48	**42**	**54**

Worksheet 14: Multiplying by 10, 100 and 1 000

Activity 1

1. 40; 60; 80; 100; 120
2. 150; 300; 450; 1 000; 2 500
3. 120; 900; 1 500; 180; 2 400
4. 5; 6; 16; 12
5. 3 000; 6 000; 1 800; 3 600; 4 800
6. 7

(**Note**: The last input number for this exercise must be 700, not 500.)

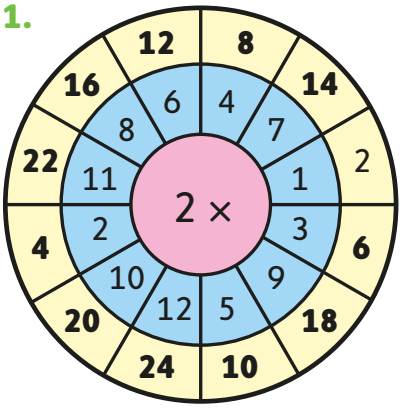
Activity 2

1. 40
2. 6
3. 8
4. 50
5. 700
6. 8
7. 90
8. 3
9. 4
10. 120

Worksheet 15: Doubling and halving

Activity 1

1.



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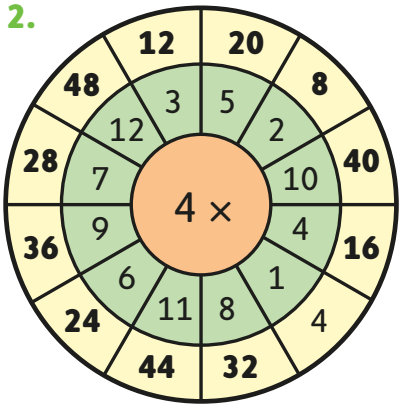

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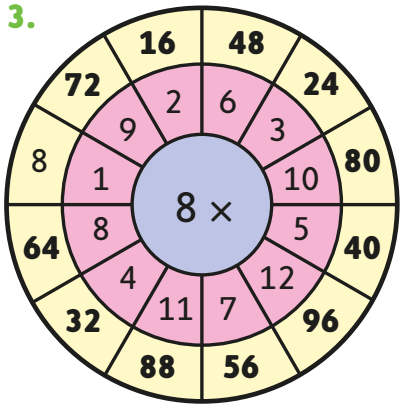


Activity 2

1. 24; 48; 96; 192; 384
2. 32; 64; 128; 256; 512

Activity 3

1. 92; 184; 368; 736; 1472; 2944; 5 888
2. 3 904; 1 952; 976; 488; 244; 122; 61

Activity 4

1. 240 marbles
2. 480 marbles
3. 360 marbles
4. 19 bags

Worksheet 16: Multiplying 2-digit numbers

Activity 1

1. $3 \times 2 = 6$; $3 \times 5 = 15$; $3 \times 10 = 30$; $3 \times 8 = 24$
2. $9 \times 5 = 45$; $9 \times 8 = 72$; $9 \times 9 = 81$; $9 \times 4 = 36$; $9 \times 2 = 18$; $9 \times 7 = 63$
3. $6 \times 7 = 42$; $6 \times 9 = 54$; $6 \times 10 = 60$; $6 \times 1 = 6$; $6 \times 8 = 48$; $6 \times 3 = 18$

Activity 2

1. 3 672
2. 882

Activity 3

1. 2 210
2. 3 354
3. 2 535
4. 2 914
5. 5 432
6. 2 660

Activity 4

Learners' own work

Worksheet 17: Multiplication word problems

Activity 1

1. 455 people
2. 8 and 7
3. 2 and 10 and 3 (**Note:** The sum in the Activity Book should be 15.)
4. 630 oranges
5. 1 440 pages
6. 903 learners
7. 1 125 m
8. 936 km
9. 799
10. R640

Worksheet 18: Division (1)

Activity 1

1. 5; 8; 11; 13; 6
2. 7; 2; 3; 6; 12
3. 20; 24; 32; 40; 36
4. ÷7; 4; 5

Activity 2

1. 8
2. 45
3. 80
4. 24
5. 32
6. 49
7. 45
8. 54
9. 36

Activity 3

1. 9
2. 30
3. 4
4. 5
5. 90
6. 7
7. 200
8. 300
9. 70
10. 50
11. 300
12. 7

Worksheet 19: Division (2)

Activity 1

1. $10 \div 2 = 5$; $12 \div 2 = 6$; $8 \div 2 = 4$; $6 \div 2 = 3$; $18 \div 2 = 9$; $16 \div 2 = 8$; $20 \div 2 = 10$; $14 \div 2 = 7$
2. $6 \div 3 = 2$; $30 \div 3 = 10$; $27 \div 3 = 9$; $9 \div 3 = 3$; $12 \div 3 = 4$; $24 \div 3 = 8$; $15 \div 3 = 5$; $18 \div 3 = 6$
3. $20 \div 4 = 5$; $24 \div 4 = 6$; $16 \div 4 = 4$; $12 \div 4 = 3$; $36 \div 4 = 9$; $32 \div 4 = 8$; $40 \div 4 = 10$; $28 \div 4 = 7$
4. $36 \div 6 = 6$; $12 \div 6 = 2$; $60 \div 6 = 10$; $54 \div 6 = 9$; $18 \div 6 = 3$; $24 \div 6 = 4$; $48 \div 6 = 8$; $66 \div 6 = 11$

   (**Note:** 50 in this exercise is incorrect; it should be 66.)

Activity 2

1. 213
2. 41 rem 2
3. 137
4. 81 rem 4
5. 52 rem 7
6. 116 rem 4
7. 65 rem 1
8. 112 rem 2
9. 27

Extension Activity

1. 16; 8
2. 84; 28
3. 112; 8
4. 3; 4

Worksheet 20: Division word problems

Activity 1

1. 37 bars of chocolate
2. 57 buckets
3. 30 sweets
4. 164 potatoes
5. 70 bars of soap
6. R79 per doll

Extension Activity

1. 80 cm
2. 306 layers
3. 82 tiles
4. 107 cm

Worksheet 21: Multiples and factors

Activity 1

1. 3; 6; 9; 12; 15; 18; 21; 24; 27; 30; 33; 36; 39; 42; 45; 48; 51; 54; 57; 60; 63…
2. 7; 14; 21; 28; 35; 42; 49; 56; 63; 70; 77; 84; 91; 98…
3. 21; 42; 63…

Activity 2

1. 2; 10; 5; 20; 10; 1
2. 45; 10; 5; 75; 200; 15; 30; 25; 40; 50; 20; 125; 10; 35; 150; 60
3. 75; 200; 25; 50; 125; 150
4. 9; 7; 1; 63
5. 72; 24; 48; 12; 36; 60

Extension Activity

1. 48 years old
2. 3 ladybugs

Worksheet 22: Ordering and comparing fractions (1)

Activity 1

1. a) $\frac{2}{2}$ b) $\frac{3}{2} = 1\frac{1}{2}$ c) $\frac{4}{2} = 2$
   d) $\frac{5}{2} = 2\frac{1}{2}$ e) $\frac{6}{2} = 3$
2. 2; 4; 3
3. $2\frac{1}{2}$; 10; 20
4. 12; 24

Activity 2

1. $1\frac{1}{5}$; $1\frac{2}{5}$; $1\frac{3}{5}$; $1\frac{4}{5}$; 2; $2\frac{1}{5}$; $2\frac{2}{5}$
2. $7\frac{1}{4}$; $7\frac{2}{4}$; $7\frac{3}{4}$; 8; $8\frac{1}{4}$; $8\frac{2}{4}$
3. $\frac{8}{12}$; $\frac{9}{12}$; $\frac{10}{12}$; $\frac{11}{12}$; 1; $1\frac{1}{12}$

Activity 3

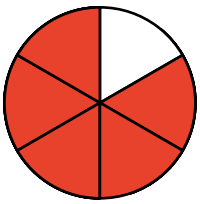
1. $\frac{1}{8}; \frac{1}{4}; \frac{1}{3}; \frac{2}{3}; \frac{4}{3}$

2. $\frac{1}{6}; \frac{3}{10}; \frac{2}{4}; \frac{3}{4}; \frac{7}{8}$

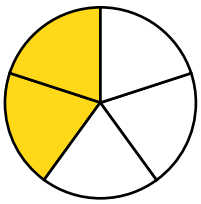
Worksheet 23: Equivalent fractions (1)

Activity 1

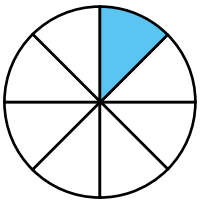
1. $\frac{10}{12} = \frac{5}{6}$



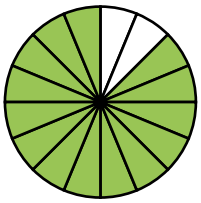
2. $\frac{4}{10} = \frac{2}{5}$



3. $\frac{2}{16} = \frac{1}{8}$



4. $\frac{7}{8} = \frac{14}{16}$



Activity 2

1. a) $\frac{4}{16} = \frac{5}{20} = \frac{6}{24}$

   b) $\frac{4}{40} = \frac{5}{50} = \frac{6}{60}$

   c) $\frac{1}{6} = \frac{4}{24} = \frac{5}{30} = \frac{6}{36}$

   d) $\frac{3}{7} = \frac{6}{14} = \frac{15}{35}$

2. $\frac{2}{6} = \frac{3}{9} = \frac{4}{12} = \frac{5}{15} = \frac{6}{18}$

Activity 3

1. $\frac{2}{18} = \frac{3}{27} = \frac{4}{36} = \frac{5}{45} = \frac{6}{54}$

2. $\frac{6}{8} = \frac{9}{12} = \frac{12}{16} = \frac{15}{20} = \frac{18}{24}$

3. $\frac{2}{14} = \frac{3}{21} = \frac{4}{28} = \frac{5}{35} = \frac{6}{42}$

Worksheet 24: Equivalent fractions (2)

Activity 1

1. $\frac{8}{14} = \frac{12}{21} = \frac{16}{28}$

2. $\frac{2}{12} = \frac{3}{18} = \frac{4}{24}$

3. $\frac{4}{10} = \frac{6}{15} = \frac{8}{20}$

Activity 2

1. $\frac{6}{10}$

2. $\frac{10}{12}$

3. $\frac{6}{8}$

4. $\frac{4}{16}$

Activity 3

1. $\frac{2}{12} = \frac{3}{18} = \frac{4}{24} = \frac{5}{30}$ 2. $\frac{12}{14} = \frac{18}{21} = \frac{24}{28} = \frac{30}{35}$ 3. $\frac{10}{24} = \frac{15}{36} = \frac{20}{48} = \frac{25}{60}$

Activity 4

3 squares

Extension Activity

A = $\frac{1}{4}$; B = $\frac{1}{8}$; C = $\frac{1}{6}$; D = $\frac{1}{12}$

Worksheet 25: Adding fractions

Activity 1

1. $\frac{7}{9}$ 2. $\frac{6}{8} = \frac{3}{4}$

Activity 2

1. 12 marbles 2. 2 cupcakes

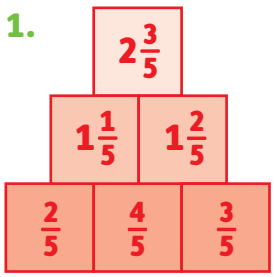
3. a) $\frac{3}{4}$ = 12 marbles b) $\frac{5}{8}$ = 10 marbles
   c) $\frac{6}{10}$ = 6 cupcakes d) $\frac{1}{2}$ = 5 cupcakes

Activity 3

1. $\frac{3}{5}$ 2. $\frac{6}{7}$ 3. $\frac{6}{8}$ 4. $\frac{4}{6}$
5. $\frac{10}{12}$ 6. $\frac{6}{9}$ 7. $\frac{5}{10}$ 8. $\frac{3}{4}$

Activity 4

1.



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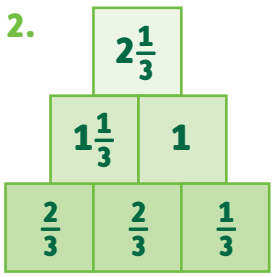

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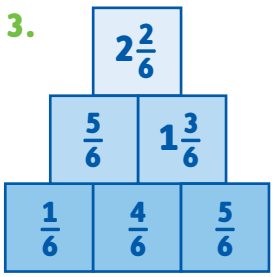

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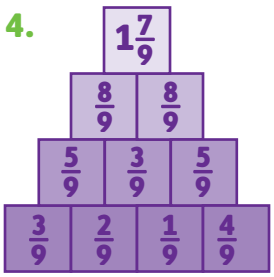


Activity 5

1; $1\frac{1}{4}$; 2; $2\frac{1}{5}$; $2\frac{3}{5}$; 3; $3\frac{1}{3}$; $3\frac{2}{3}$; 4; $4\frac{2}{4}$; $4\frac{3}{4}$

Worksheet 26: Ordering and comparing fractions (2)

Activity 1

1. $\frac{1}{4}$ 2. $\frac{1}{3}$ 3. $\frac{2}{4}$ 4. $\frac{9}{12}$
5. $\frac{2}{3}$ 6. $\frac{7}{12}$ 7. $\frac{3}{4}$ 8. $\frac{7}{9}$

Activity 2

1. $\frac{1}{2} < \frac{3}{4} < \frac{7}{9} < \frac{5}{6} < \frac{7}{8} < \frac{9}{10}$
2. $\frac{3}{10} < \frac{1}{3} < \frac{4}{9} < \frac{5}{8} < \frac{5}{6} < \frac{7}{8}$

Activity 3

$\frac{2}{5}; \frac{4}{5}$

$7\frac{5}{8}; 7\frac{6}{8}; 8; 8\frac{1}{8}; 8\frac{3}{8}$

Activity 4

Klara ate the most cake.

Extension Activity

1. $\frac{1}{4}; \frac{1}{6}; \frac{1}{8}; \frac{1}{12}$
2. The denominator doubles when halving a fraction.

Worksheet 27: Sharing and grouping

Activity 1

1. a) $\frac{8}{12} = \frac{2}{3}$ b) $\frac{8}{12}$ or $\frac{2}{3}$
2. a) $\frac{6}{8} = \frac{3}{4}$ b) $\frac{6}{8}$ or $\frac{3}{4}$

Activity 2

1. a) 4 pieces of fruit
   b) $\frac{4}{12} = \frac{1}{3}$
2. $2\frac{2}{5}$ pieces of fruit
3. a) 2 biscuits
   b) $\frac{2}{12} = \frac{1}{6}$
4. $1\frac{1}{4}$ loaves of bread

Worksheet 28: Number patterns (1)

Activity 1

1. 19; Rule: Add 4
2. 27; Rule: Add 5
3. 15; Rule: Subtract 7
4. 13; Rule: Subtract 6
5. 11; Rule: Add the previous term and the term number
6. 36; Rule: Add the term number subtracted by 1, and then multiply by 3

Activity 2

1. 25; 34; 43; 52; 61
2. 13; 23; 33; 43; 55
3. 61; 55; 49; 43; 37
4. 0
5. odd

Extension Activity

Add 2 to the denominator and 2 to the numerator

Activity 3

1. 25 + 9 = 34; 34 + 9 = 43; 43 + 9 = 52; 52 + 9 = 61; 61 + 9 = 70
2. 13 + 10 = 23; 23 + 10 = 33; 33 + 10 = 43; 43 + 10 = 53; 53 + 10 = 63

Activity 4

1. 5 994; 9 999; 99 999; 599 994
2. 603; 12; 15; 1005
3. 333; 12; 15; 18; 666
4. 3 003; 4; 5; 5 005; 6; 6 006

Extension Activity

1. 3 + 12 = 4 + 11 = 5 + 10 = 6 + 9 = 7 + 8
2. 4 + 30 = 6 + 28 = 8 + 26 = 10 + 24 = 12 + 22

Worksheet 29: Number patterns (2)

Activity 1

1. 16 poles
2. Add four poles for every section
3.

Sections	1	2	3	4	5	6	8	10	50
Poles	4	8	12	16	20	24	32	40	200

4. 50 poles; 400 sections

Activity 2

1. Wiggle 4: 
2. Wiggle multiplied by 2, added to 1
3.

Wiggle	1	2	3	4	5	6	8	10	20
Lines	3	5	7	9	11	13	17	21	41

4. 31 lines
5. $(1 \times 2) + 1 = 3$; $(2 \times 2) + 1 = 5$; $(3 \times 2) + 1 = 7$; $(4 \times 2) + 1 = 9$; $(5 \times 2) + 1 = 11$

Activity 3

1. Picture 4

2.

Picture	1	2	3	4	5
Blue triangles	1	3	6	10	15
White triangles	0	1	3	6	10

3. Add consecutive numbers, starting from 1 (+1, +2, +3, +4)
4. Add consecutive numbers, starting from 0 (+0, +1, +2, +3)
5. Number of blue triangles always matches next pictures number of white triangles.
6. 55 blue triangles; 45 white trianges

Worksheet 30: Number patterns (3)

Activity 1

1. 15; 18; Rule: Add 3
2. 10; 5; Rule: Halve
3. 66; 55; Rule: Subtract 11
4. 25; 36; Rule: Sum of pattern number and 1, squared
5. 125; 216; Rule: Cube of the pattern number

Activity 2

1. 19; 14; 9; 4; -1
2. 8; 24; 72; 216; 648
3. 512; 128; 32; 8; 2
4. 5; 10; 20; 40; 80
5. 3 125; 625; 125; 25; 5
   (**Note:** First number should be 3 125)

Activity 3

1. **a & b)** $3 \times 6 = 18$; $5 \times 6 = 30$; $10 \times 6 = 60$; $12 \times 6 = 72$; $20 \times 6 = 120$
2. **a)** $18 \div 2 = 9$; $20 \div 2 = 10$; $30 \div 2 = 15$; $32 \div 2 = 16$; $40 \div 2 = 20$

   b)

Length of plank (cm)	18	20	30	32	40
Length of cut pieces	9	10	15	16	20

3. **a)** $3 \times 9 = 27$; $4 \times 9 = 36$; $5 \times 9 = 45$; $6 \times 9 = 54$; $12 \times 9 = 108$

   b) R108

Activity 4

Learners' own work

Worksheet 31: Number patterns (4)

Activity 1

1. 12 squares
2.

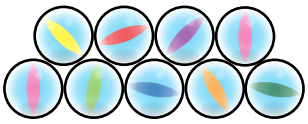
Pattern number	1	2	3	4	5
Number of squares	3	6	9	12	15

3. 24 squares

4. Pattern 11

Activity 2

1.



2.

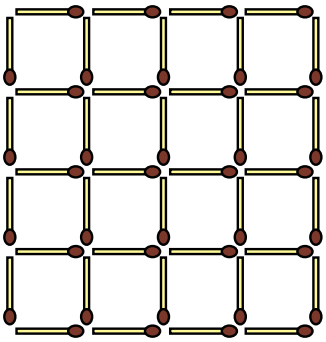
Pattern number	1	2	3	4	5	7	10
Number of marbles	1	3	5	7	9	11	13

3. Add consecutive numbers starting to the pattern number

4 & 5. $4 \times 2 - 1 = 7$; $5 \times 2 - 1 = 9$; $6 \times 2 - 1 = 11$; $7 \times 2 - 1 = 13$

Extension Activity

1.



2.

Pattern number	1	2	3	4	5
Number of squares	1	4	9	16	25
Number of matches	4	12	24	40	60

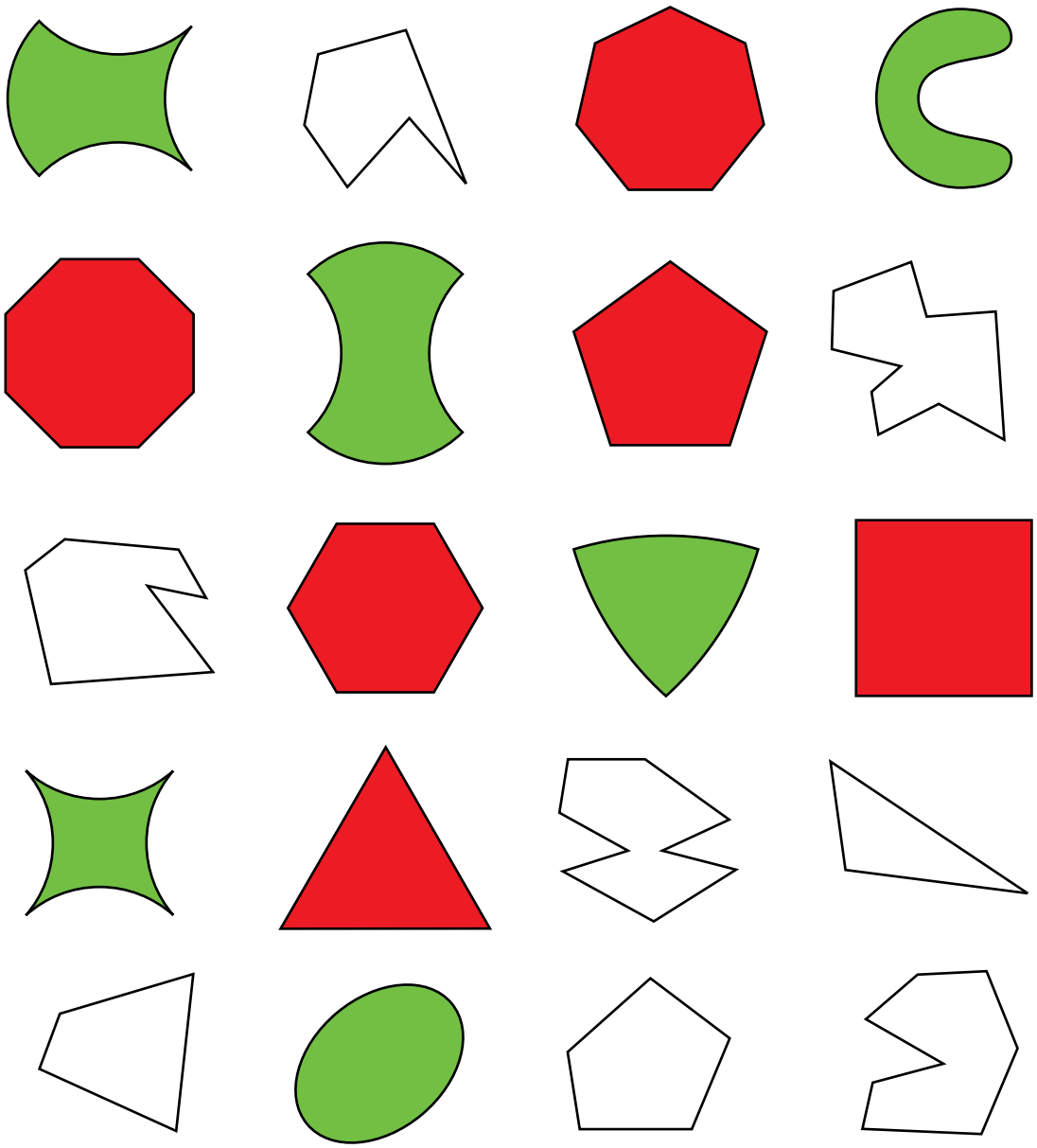
3. n^2

4. $n \times ((2 \times n) + 2)$

Worksheet 32: 2-D shapes (1)

Activity 1

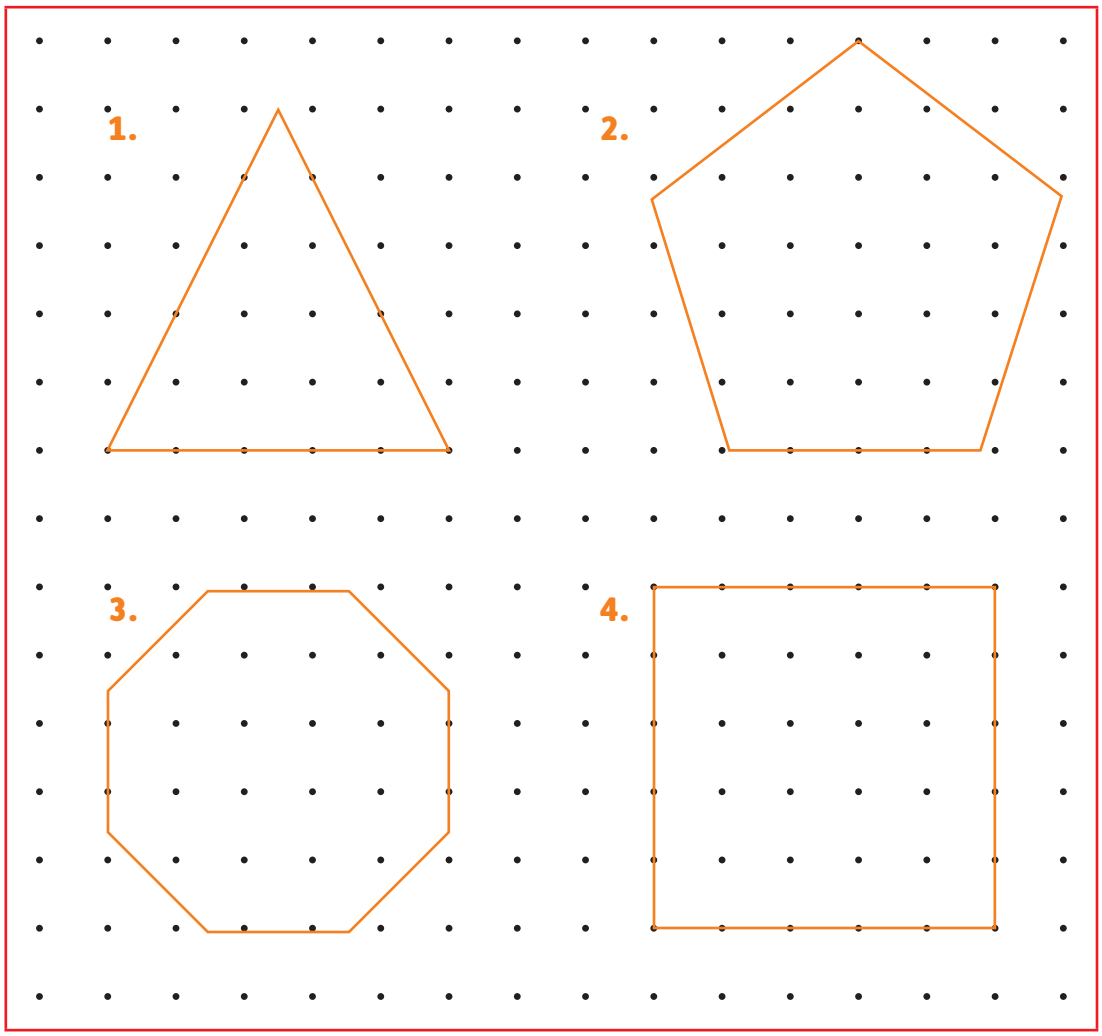
1 & 2.



3. A regular polygon is a polygon that is equiangular (all angles are equal in measure) and equilateral (all sides have the same length).

Worksheet 33: 2-D shapes (2)

Activity 1



Worksheet 34: 2-D shapes (3)

Activity 1

Leaners' own work

Activity 2

Learners' own work

Activity 3

1. Learners' own solution
2. Learners' own solution
3. Learners' own solution

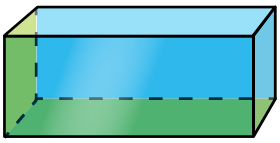
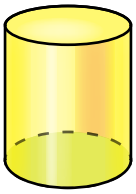
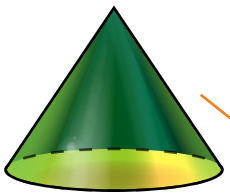
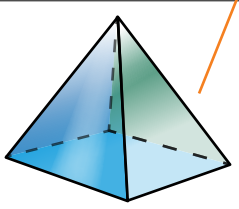
Worksheet 35: Recognising 3-D objects

Activity 1

Spheres	Cylinders	Cones	Pyramids	Rectangular prisms	Cubes
A, I	E, F, J	B, D	G	C, K, M	H, L

Worksheet 36: Properties of 3-D objects

Activity 1

3-D object	Name	Reason
	Sphere	Sphere has one curved surface and no points
	Cylinder	Cylinder has two circular ends connected by straight parallel sides
	Square-based pyramid	Square-based pyramid has a square base and 4 triangular sides that meet at a point
	Rectangular prism	Rectangular prism has 6 rectangular sides
	Cone	Cone has a curcular base that tapers to a point

Extension Activity

9 squares × 6 faces = 54 squares

Worksheet 37: 3-D objects

Activity 1

Name of shape	Shape of faces	Number of faces
Cube	Square	6
Rectangular prism	Rectangle	6
Square-based pyramid	Square and triangle	5

Activity 2

1. Sphere and cylinder
2. Cylinder
3. Cube
4. 3 faces

Extension Activity

1. 8 small cubes
2. 12 small cubes
3. 6 small cubes

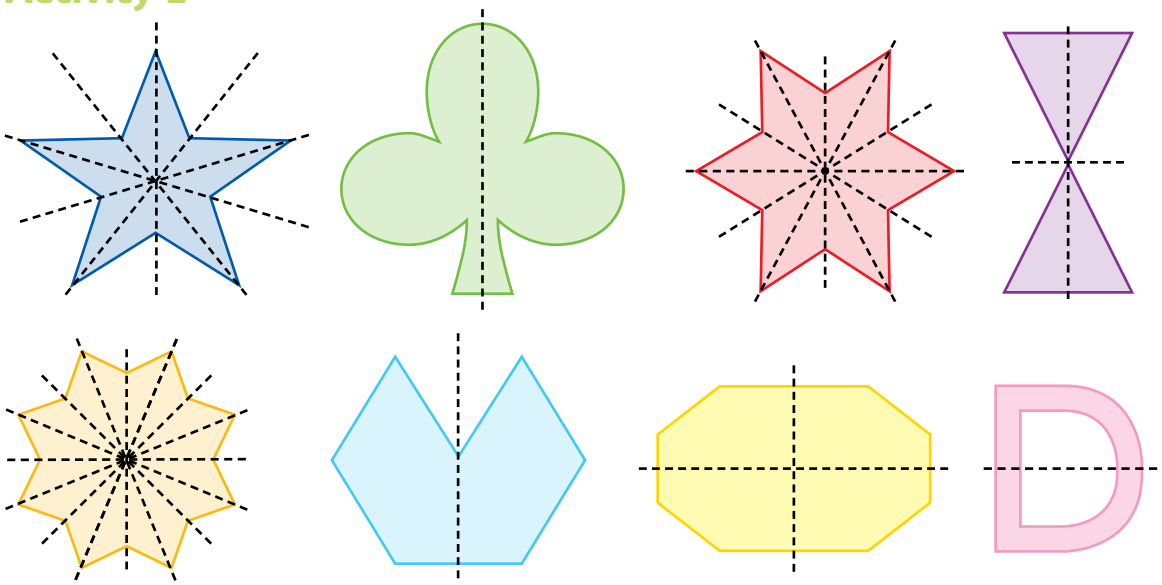
Worksheet 38: Making 3-D objects

Activity 1

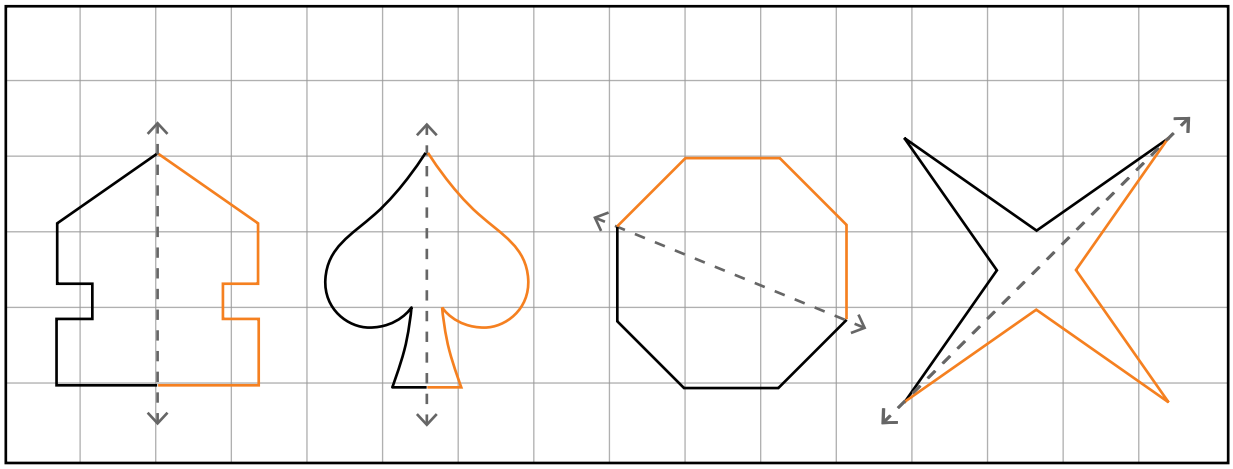
Learners' own work

Worksheet 39: Symmetry (1)

Activity 1



Activity 2



Worksheet 40: Symmetry (2)

Activity 1

1.

Number of sides	Number of lines of symmetry
3	3
4	2
4	2
5	5
1	Infinite lines of symmetry

2. Number of lines of symmetry never exceed number of sides (except for circles).

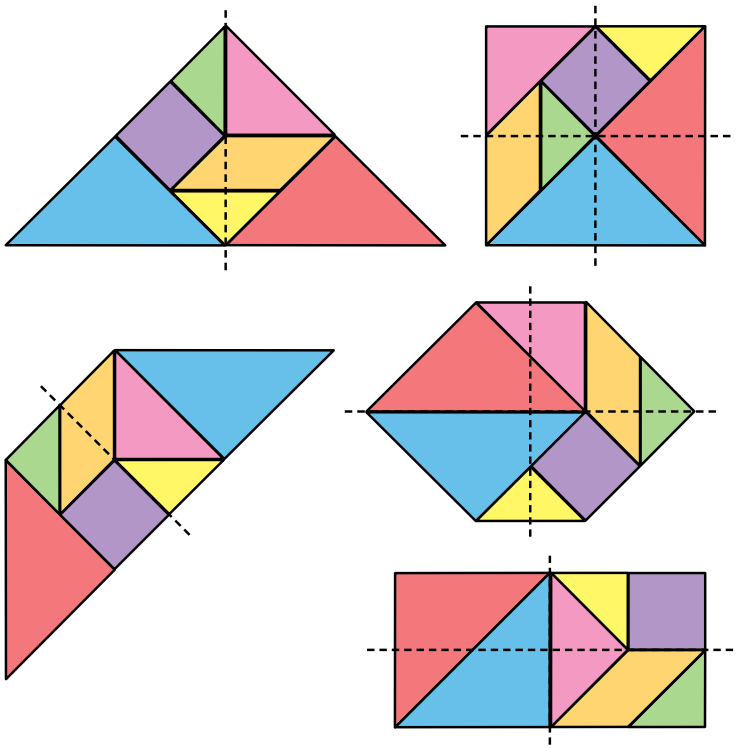
3. Infinite. If you fold a circle in half any way, it will always be folded on a line of symmetry.

Worksheet 41: Transformations (1)

Activity 1

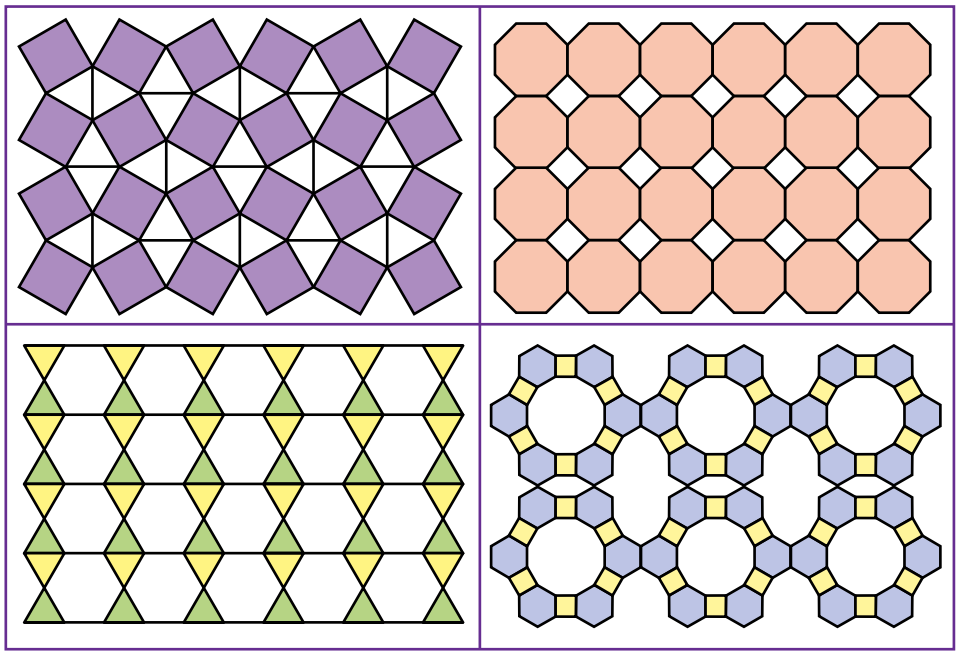
Learners' own work

Activity 2



Worksheet 42: Transformations (2)

Activity 1

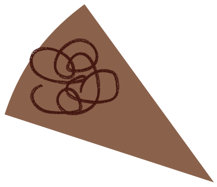
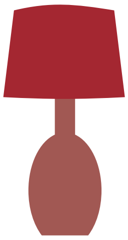
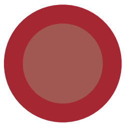
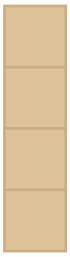
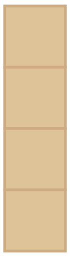
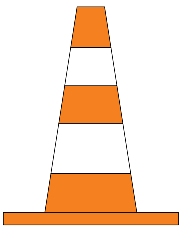
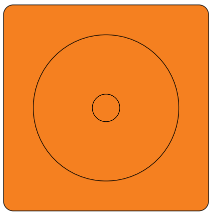
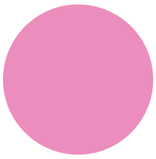


Activity 2

Learners' own work

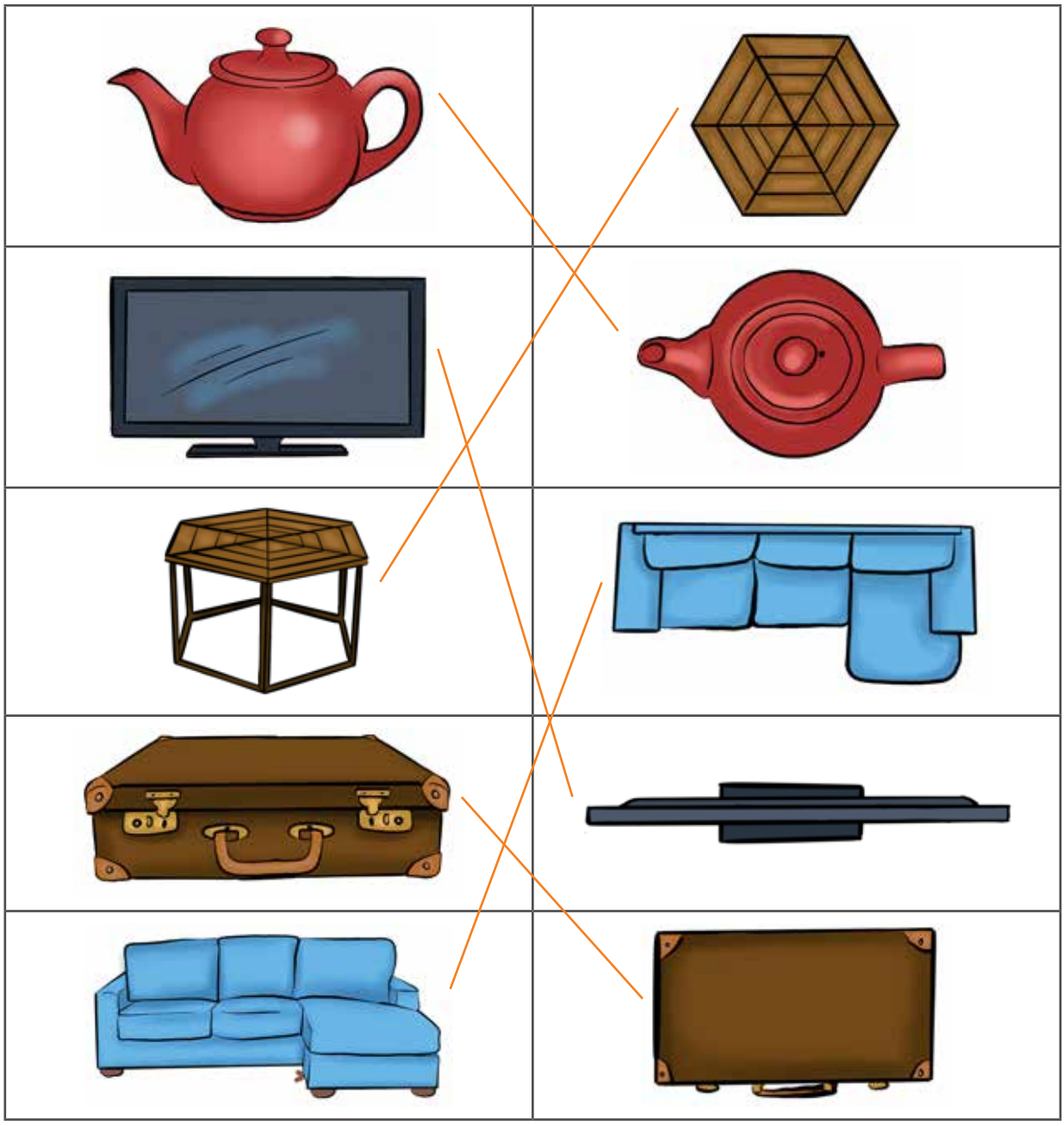
Worksheet 43: Viewing of objects (1)

Activity 1

Object	Front view	Top view
		
		
		
		
		
		

Worksheet 44: Viewing of objects (2)

Activity 1



Worksheet 45: Position and movement

Activity 1

1. **a)** G6 **b)** C4 **c)** A4

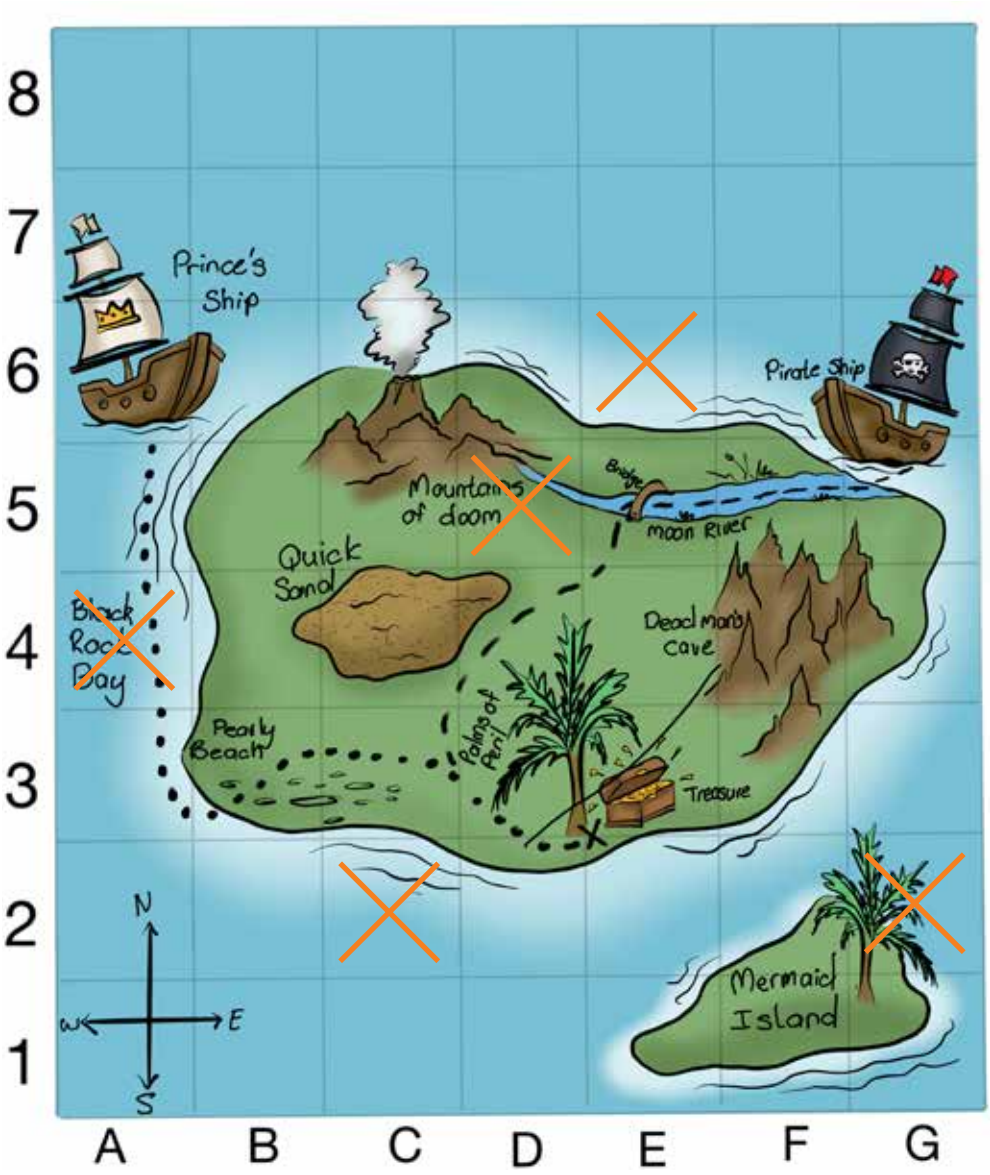
d) F4 **e)** E3

2. **a)** the Prince's ship **b)** Mermaid Island

c) the bridge **d)** Pearly Beach

e) Mountains of doom

3.



4. G5 to F5 to E5 to E4 to D4 to D3 to D2 to E3

5. A5 to A4 to A3 to B3 to C3 to D3 to D2 to E3

Worksheet 46: Length (1)

Activity 1

Learners' own work

Activity 2

1. 14,3 cm **2.** 2,5 cm **3.** 26,8 cm

4. 11,5 cm **5.** 10,0 cm

Activity 3

1. **a)** cm **b)** km **c)** m **d)** m

2. **a)** size of book

b) size of calculator

c) length of classroom

d) distance from your house to school

Worksheet 47: Length (2)

Activity 1

Learners' own work

Activity 2

1. **a)** 5,7 cm **b)** 45 mm **c)** 103 mm

d) 89 mm **e)** 11,5 cm **f)** 5,7 cm

2. line e

3. line b

4. 7 cm or 70 mm

Activity 3

1. 1,52 m

2. She is 6 m behind the starting line.

3. 4 pieces

Worksheet 48: Length (3)

Activity 1

100 cm = 1 m

3 m = 300 cm

1 000 m = 1 km

1 cm = 10 mm

2 m = 200 cm

400 cm = 4 m

70 mm = 7 cm

9 m = 900 cm

Activity 2

1. 550 cm; 5 m; 51 cm; 500 mm
2. 81 m; 801 cm; 81 cm = 810 mm
3. 9 m; 96 cm; 96 mm; 9 cm
4. 3 000 km; 3 000 m; 300 cm; 3 mm

Activity 3

1. 130 cm
2. 59 cm
3. 37,5 cm
4. 360 m
5. 425 cm

Worksheet 49: Length (4)

Activity 1

1. 5 204 m
2. 2,4 m
3. 4,75 km
4. 7,4 cm

Activity 2

1. 400 cm
2. 60 mm
3. 800 cm
4. 500 m
5. 900 m

Activity 3

1.

Animal	Length	Round to the nearest 10	Round to the nearest 100
Lion	298 cm	300 cm	300 cm
Leopard	190 cm	190 cm	200 cm
Rhino	426 cm	430 cm	400 cm
Buffalo	173 cm	170 cm	200 cm
Elephant	686 cm	690 cm	700 cm

2. 173 cm; 190 cm; 298 cm; 426 cm; 686 cm

3. 3,88 m

Extension

4. 1 773 cm = 17,73 m

Worksheet 50: Mass (1)

Activity 1

1. kg; ± 2 kg

2. g; ± 200 g

3. kg; ± 10 kg

Activity 2

1. 2,3 kg

2. 1,4 kg

3. 750 g

4. 520 g

Worksheet 51: Mass (2)

Activity 1

1. 0,75 kg

2. 2 kg

3. 8 000 g

4. 2 kg 685 g

5. 5 kg 750 g

6. 4 kg 130 g

7. 25 000 g

8. 6 083 g

9. 2 200 g

10. 2,25 kg

Activity 2

1. $20\frac{1}{2}$ packets of chips
2. 1 640 g and 1,64 kg
3. 980 g
4. 3 packets of chips
5. 20 g
6. 41 cookies
7. 10 g

Activity 3

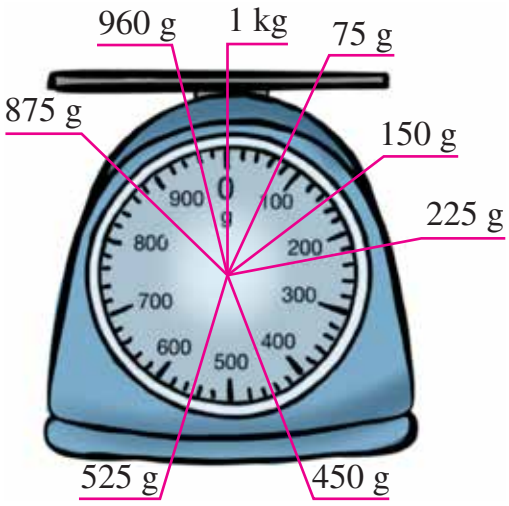
1. 6,698 kg
2. 16 kg 591 g
3. 3 kg 222 g
4. 6,28 kg
5. 15 775 kg

Activity 4

1. 6 packets
2. 89 kg 950 g
3. 60 kg 466 g
4. 16 cakes
5. 250 g

Worksheet 52: Mass (3)

Activity 1



Activity 2

1. kg
2. g
3. g
4. kg
5. kg

Activity 3

1. 325 g; $1\frac{1}{4}$ kg; 1 300 g; 3 000 g; $3\frac{1}{2}$ kg

2. 125 g; 560 g; 1 500 g; $2\frac{1}{4}$ kg; $\frac{83}{4}$ kg

3. $\frac{1}{2}$ kg; 550 g; 750 g; 1 250 g; $2\frac{3}{4}$ kg

Worksheet 53: Capacity (1)

Activity 1

1. ℓ **2.** mℓ **3.** mℓ

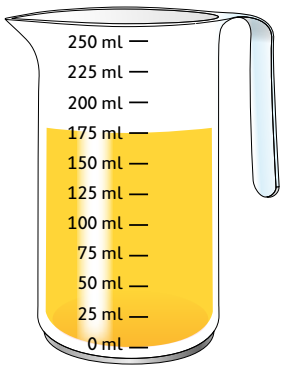
4. ℓ **5.** mℓ

Activity 2

1. 90 mℓ **2.** 16 mℓ **3.** 750 mℓ

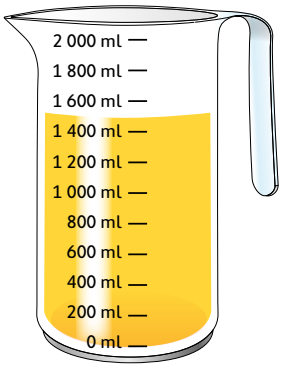
Activity 3

1.



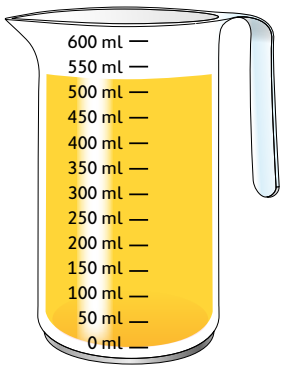
175 ml

2.



$1\frac{1}{2}$ ℓ

3.



525 ml

Activity 4

1. 950 mℓ **2.** 2 000 mℓ = 2 ℓ

3. 550 mℓ **4.** 850 mℓ

Activity 5

1. 350 mℓ **2.** 161 mℓ

3. 425 mℓ **4.** 7 teaspoons

Worksheet 54: Capacity (2)

Activity 1

9 ℓ = 9 000 mℓ

5 300 mℓ = 5 ℓ 300 mℓ

3 500 mℓ = $3\frac{1}{2}$ ℓ

3 ℓ 200 mℓ = 3 200 mℓ

4 100 mℓ = 4ℓ 100 mℓ

$\frac{1}{4}$ ℓ = 250 mℓ

$5\frac{1}{2}$ ℓ = 5 500 mℓ

Activity 2

1. 25 mℓ **2.** 250 mℓ **3.** 6 teaspoons

Extension

4. 1, 25 ℓ flour

1,25 ℓ butter

950 mℓ cocoa

600 mℓ sugar

25 mℓ baking soda

150 mℓ nuts

500 mℓ chocolate chips

Activity 3

1. 6 ℓ; 5 ℓ 100 mℓ; $3\frac{1}{4}$ ℓ; 3 000 mℓ; $2\frac{1}{4}$ ℓ

2. $5\frac{1}{2}$ ℓ; 4 200 mℓ; 3 100 mℓ; 3 ℓ; $2\frac{3}{4}$ ℓ

3. $12\frac{1}{2}$ ℓ; 8 ℓ; 1 ℓ 200 mℓ; 800 mℓ; 650 mℓ

Worksheet 55: Capacity (3)

Activity 1

1. < **2.** = **3.** >

4. = **5.** < **6.** =

Activity 2

1. 3 cups

2. 4 cups

3. 3 teaspoons

4. 125 mℓ

5. 12 cakes

Activity 3

1. 101 mℓ

2. **a)** 10 half-litre bottles

b) 20 cups

Extension Activity

4 × 1ℓ

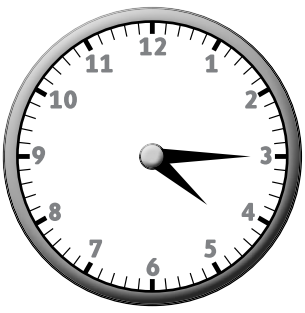
8 × 500 mℓ

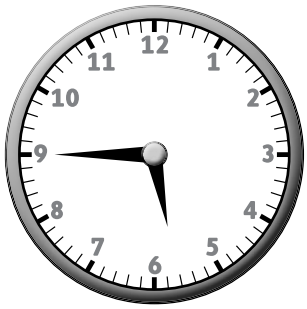
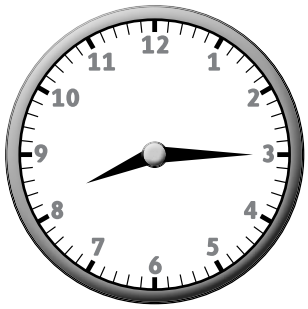
16 × 250 mℓ

Can substitute any of 1ℓ bottle for 2 × 500 mℓ OR 4 × 250 mℓ OR 1 × 500 mℓ and 2 × 250 mℓ

Worksheet 56: Telling the time (1)

Activity 1

1. At 11:05 a.m. I have tea.	**2.** Sarah has a doctor's appointment at 16:15 today.	**3.** There is athletics practice at twenty to six this afternoon.
		

4. I have to be home for dinner at ten to seven this evening.	**5.** I wake up for school at 5:45 a.m.	**6.** I go out with my friends at 8:15 p.m.
		
7. Mother picks the children up at 15:22.	**8.** The art class starts at 17:50.	**9.** The plane leaves at 2:05 p.m. today.
		

Worksheet 57: Telling the time (2)

Activity 1

1. 10:35; Twenty-five to eleven in the morning

2. 14:40; Twenty to three in the afternoon

3. 22:05; Five minutes past ten at night

4. 12:20; Twenty past midday

5. 09:50; Ten to ten in the morning

6. 23:45; Quarter to midnight

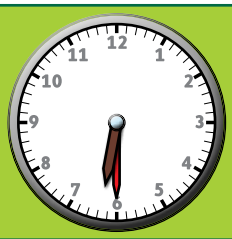
7. 06:26; Twenty-six minutes past six in the morning

8. 08:35; Twenty-five minutes to nine in the morning

9. 13:56; Four minutes to two in the afternoon

Worksheet 58: Telling the time (3)

Activity 1

	24:06		
11:18			
18:55		15:15	
	19:49	06:30	
05:10			
	20:18		

Worksheet 59: 24-hour time and 12-hour time

Activity 1

1. 02:05
2. 20:00
3. 06:54
4. 21:20
5. 03:15
6. 12:40

Activity 2

1. 7:25 p.m.
2. 3:54 p.m.
3. 6:47 a.m.
4. 4:50 a.m.
5. 10:25 p.m.
6. 7:55 p.m.

Activity 3

5:16 a.m.; 10:54 a.m.; 2:00 p.m.; 7:45 p.m.; 10:15 p.m.; 22:23; 11:49 p.m.

Activity 4

1. 2 h 15 min
2. 0 h 32 min
3. 9 h 55 min
4. 2 h 17 min
5. 0 h 49 min

Worksheet 60: Time – duration (1)

Activity 1

1. Yes, 9:45 is before 10:01
2. 1 hour 29 min
3. 14:16 or 2:16 p.m.
4. 3 h 34 min
5. 10:20

Extension Activity

16:55

Worksheet 61: Time – duration (2)

Activity 1

1. 45 min
2. 18 min
3. 3 h 2 min
4. 23:02
5. 23:32
6. 32 min

Worksheet 62: Time word problems

Activity 1

1. 180 min
2. 360 min
3. 300 sec
4. 12 hours
5. $\frac{3}{4}$ hour
6. 1 hour 5 min
7. 600 sec
8. 9 hours
9. 570 min
10. 195 min

Activity 2

1. 07:20 a.m.
2. 13:05
3. 09:00 a.m.
4. 19:38
5. 7 h 13 min

Worksheet 63: Calendars

Activity 1

1. Monday
2. Tuesday
3. 11 July
4. 14 July
5. 9 July
6. 4 June
7. 15 August

Extension Activity

Friday

Worksheet 64: Perimeter of regular shapes

Activity 1

1. 16 cm
2. 16 cm
3. 18 cm
4. 20 cm
5. 20 cm
6. 20 cm
7. 4 + 8 cm
8. 16 cm

Activity 2

Learners' own work

Worksheet 65: Perimeter of irregular shapes

Activity 1

1. 24 cm
2. 24 cm
3. 28 cm
4. 16 cm
5. 18 cm
6. 18 cm
7. 28 cm
8. 32 cm

Worksheet 66: Area of irregular shapes

Activity 1

1. ± 34 cm^2
2. 12 cm^2
3. ± 16,5 cm^2
4. 11 cm^2
5. 11 cm^2
6. 14 cm^2
7. ± 31 cm^2
8. 10 cm^2

Worksheet 67: Area of regular shapes

Activity 1

1. 24 cm^2
2. 10 cm^2
3. 14 cm^2
4. 12 cm^2
5. 16 cm^2
6. 8 cm^2
7. 18 cm^2
8. 10 cm^2

Worksheet 68: Area

Activity 1

Learners' own work

Worksheet 69: Area and perimeter (extension)

Activity 1

1. 8 squares
2. 20 squares

Activity 2

1 & 2. Learners' own work

3. Perimeters are different even though areas are equal.

Activity 3

1 & 2. Learners' own work

3. Areas are different even though parameters are equal.

Worksheet 70: Volume (1)

Activity 1

1. 11 cm^3

2. 24 cm^3

3. 96 cm^3

4. 11 cm^3

5. 36 cm^3

6. 30 cm^3

Worksheet 71: Volume (2)

Activity 1

1. 20 cm^3

2. 36 cm^3

3. 40 cm^3

4. 125 cm^3

Extension Activity

1. 60 cm^3

2. length × breadth × height

3. $4 \times 5 \times 2$

Worksheet 72: Collecting data (1)

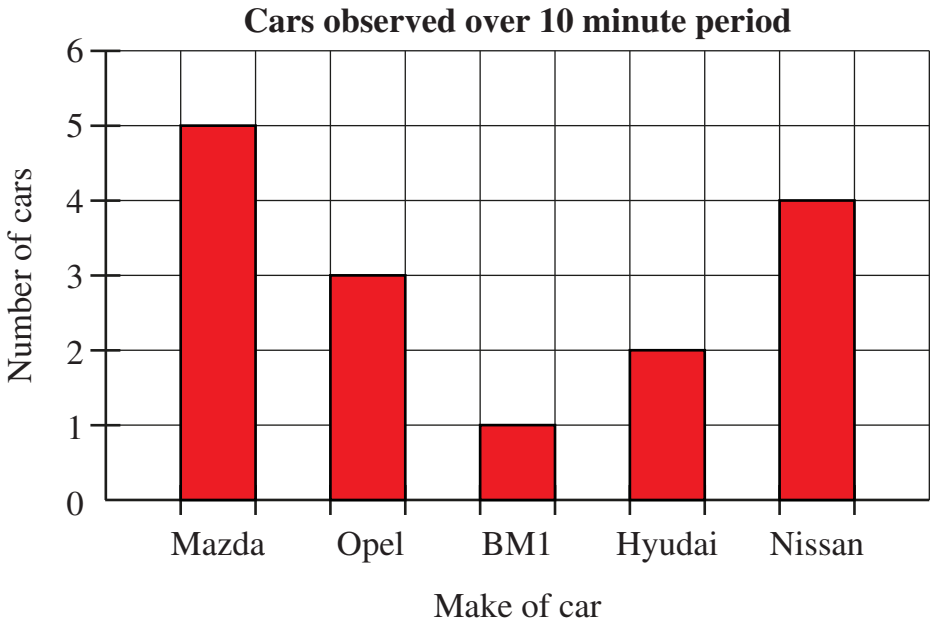
Activity 1

1.

Make of car	Tally
Mazda	IIII
Opel	III
BMW	I
Hyundai	II
Nissan	IIII

2. 3 more Mazdas
3. BMW
4. Mazda
5. 15 Mazdas
6. 15 cars

Activity 2



Worksheet 73: Collecting data (2)

Activity 1

1. Drawing
2. Watching TV
3. 10 learners
4. 42 learners

Activity 2

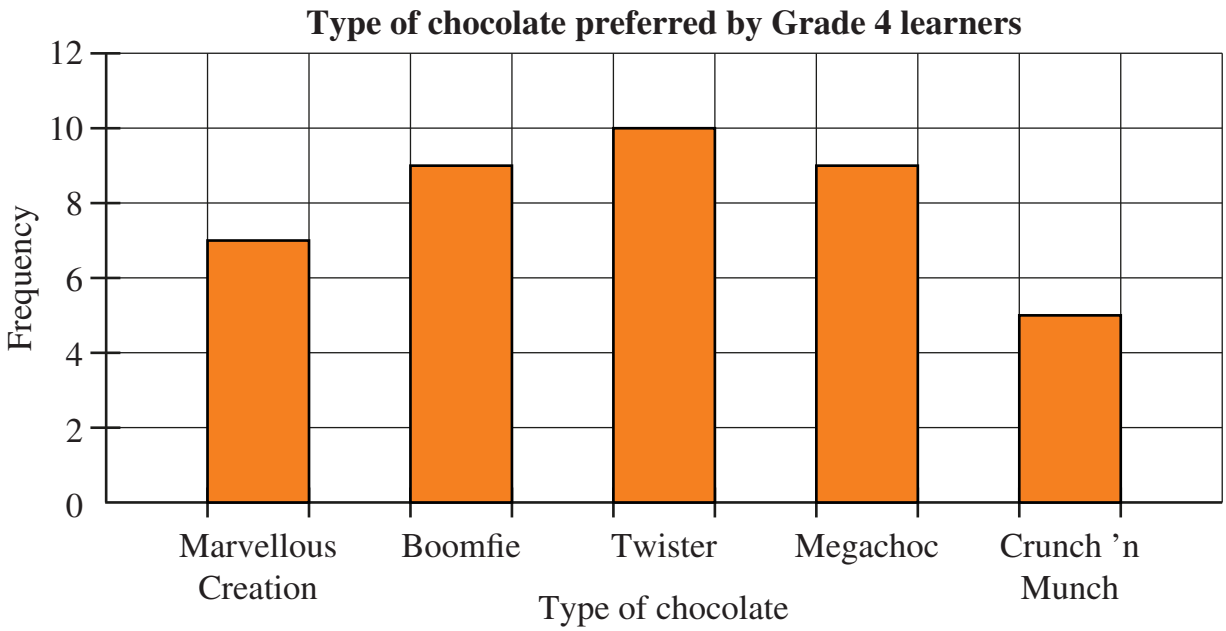
1.

Pet	Tally
Dog	IIII IIII I
Cat	IIII IIII IIII
Hamster	II
Fish	III
Rabbit	IIII
Frog	I

2. 14 learners
3. Cats
4. 35 classmates

Worksheet 74: Representing data

Activity 1



Worksheet 75: Bar graphs

Activity 1

1. The x axis contains different grades; the corresponding y value is how many learners are in that grade.
2. 175 learners

3. Grade 1
4. 4 more
5. Grade 3 and 5
6. a) Decrease over time
   b) Population growth means higher influx of learners every year.
7. Learners' own work

Activity 2

1. 22 ice creams
2. Saturday. (Any valid reason.)
3. 13 ice creams
4. Day of the week (more people out on the weekend); Temperature of the day (people prefer ice-cream in hot weather); Type of ice-cream (some types are more popular than others).

Worksheet 76: Pictographs (1)

Activity 1

1.

TV programme	Number of children
Forest Family	
Karate Rangers	
Jojo and Skip	
T Rex Terror	
Zapmag	
Telly Bears	

2. Telly Bears
3. T Rex Terror
4. 33 children

Worksheet 77: Pictographs (2)

Activity 1

1. Games
2. Dancing
3. 6 people
4. 19 people

Extension Activity

Favourite sport	Number of people	Pictogram
Football	8	
Running	5	
Swimming	9	
Netball	2	

Worksheet 78: Pie charts (1)

Activity 1

1. $\frac{1}{8}$
2. $\frac{1}{2}$
3. $\frac{1}{4}$
4. $\frac{1}{8}$

Extension Activity

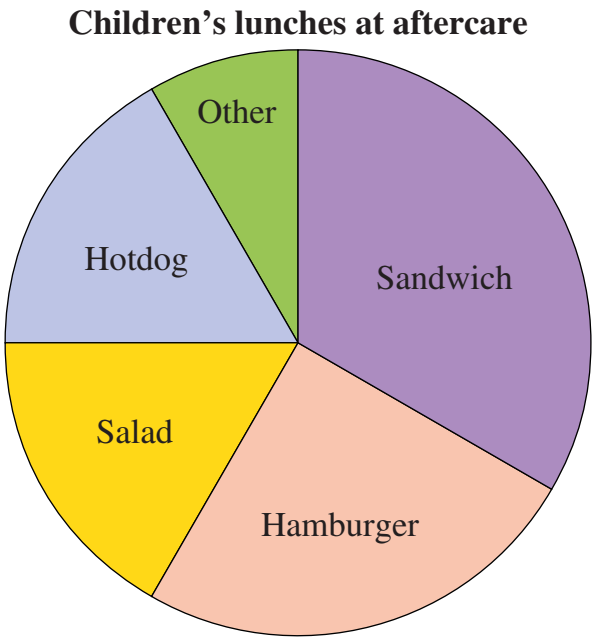
1. 5 toys
2. 20 clothes
3. 10 books
4. 5 food items

Activity 2

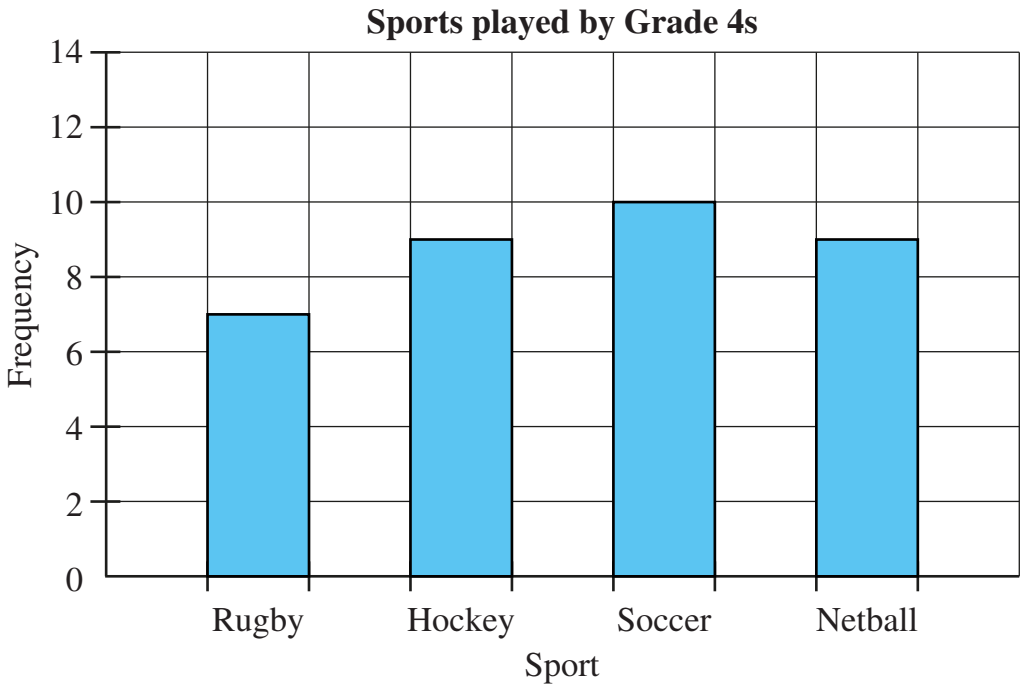
1. Chocolate brownie
2. a) Malva pudding and Sticky toffee pudding
   b) $\frac{1}{4}$
3. Ice cream
4. Cupcakes

Worksheet 79: Pie charts (2)

Activity 1



Extension Activity



Worksheet 80: Probability

Activity 1

Learners' own work